Wichita Eagle

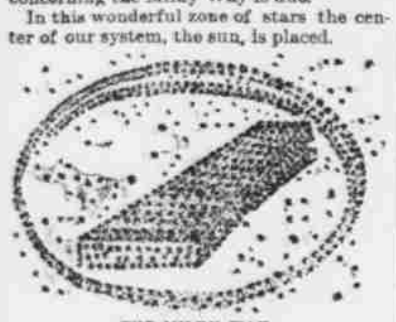
SCIENCE AND PROGRESS.

INTERESTING KNOWLEDGE PRESENTED IN BRIEF AND POPULAR FORM.

The Wonderful Phenomenon Known as the Milky Way, Which Is a Marked Feature in the Sky at This Season. What Scientists Have Thought of It.

The Galaxy or Milky Way is familiar to all readers, and although visible all the year round is perceived more plainly in August, September and October, or at the beginning and ending of that period. This zone of stars was well known to the ancients, but Galileo was the first to decide that it is formed of stars. To Sir John Herschel much of the information we have concerning the Milky Way is due.

In this wonderful zone of stars the center of our system, the sun, is placed.



THE MILKY WAY.

It was supposed to be divided as in the diagram here given, the inner portion being the stars seen in their thickness, and the outer ring representing the stars viewed in the direction of the length and breadth. But afterward Herschel modified his opinions respecting the Milky Way, and Professor Nichol, among more recent astronomers, says:

"It is only to the most careless glance that the Milky Way appears a continuous zone. Let the naked eye rest thoughtfully on any part of it, and if circumstances are favorable it will stand out rather as an accumulation of patches and streams of light in every conceivable variety of form and brightness."

The Milky Way has its greatest breadth in the "Swan," and in the "Eagle" constellation it divides itself. In the "Southern Triangle" the zone is brightest, and in the "Southern Cross" the hole or space, termed by the sailors the "Coal Sack," is very distinct. It then contracts and expands, and there is in Argo another gap. Then it is lost for a space, then it branches out, and soon crosses the Equator, dilates, contracts, opens out again and so returns to the "Swan" again.

Philosophers have discovered much upon this phenomenon, but all statements must remain more or less speculative. Mr. R. Proctor has likened the Galaxy to a coiled serpent, and considers the openings in the Milky Way as evidence that the stratum of stars is limited, and that here we can see beyond it. In fact, it would appear that it is a very complicated question; and as the zone itself is "complicated with outlying branches beyond the range of our most powerful telescopes," so an actual knowledge of the Milky Way is beyond us at present. It is composed of most extraordinary aggregations of stars, which appear not only impossible to count, but each one to be independent of the other.

Magnets and Magnetic Substances.

Magnetic substances contain the two magnetisms, but in a neutral state; that is to say, holding each other in check by their reciprocal action; such substances are iron, steel and, to a far less extent, nickel and cobalt. There is this difference between magnetic substances and magnets: in the latter the two magnetisms in each molecule are separated, and each produces a separate effect; while in magnetic substances the magnetisms are combined and produce no effect.

AN INVISIBLE LINK.

According to Ganot a magnetic substance is distinguished from a magnet as follows: A magnetic substance has no poles; if successively presented to the two ends of a magnetic needle it will attract both ends equally, while one end of a magnet would attract the one but repel the other end of the needle. Magnetic substances also have no action on each other, while magnets attract or repel, according as unlike or like poles are presented to each other.

When a magnetic substance is placed in contact with the poles of a magnet—the north pole, for instance—this acting attractively on the south magnetism of the substance, and repelling the north magnetism, it follows that in this body a separation of the two is effected, or, in other words, a true magnet is produced, for if any piece of soft iron—an iron ring, for example—be presented to a magnetized bar not merely is this ring supported, but it acquires the property of supporting the second, then this second a third, and so forth. Remove the bar, and the invisible link which unites this marvelous chain is broken, and the rings separate.

The Moon's Influence on the Weather.

La Nature commenting on an article on the influence of the moon on weather by Dr. G. Meyer says that although such investigations have hitherto given a negative result, the author thought that with the materials furnished by synoptic charts he might eliminate local influences, and he gives tables extending over a number of years which seem to show the influence of the moon in lowering the height of the barometer in the months of September to January at the time of full moon, and in raising it during the first quarter. The Deutsche Seewarte, which communicates the article, points out that a similar result has been independently arrived at by Capt. Seemann, one of the assistants of the institution. The same effect or any other is not perceptible in other months.

Electric Wires and Storms.

According to The London Electrical Review, it has been for some years the practice at the Berlin postoffice for the employes to make a note of storms and magnetic disturbances, direction of storms, length, etc., and the result has demonstrated that underground wires, without being entirely free from the influence of magnetic storms, are much less liable to disturbance than overhead ones, and on the other hand that accidents from lightning are much less serious in those towns where the overhead system is in vogue.

It Means Nothing.

When England sends a cruiser or a fleet of them to Vancouver it means nothing, and when the United States sends a real able bodied man-of-war toward Behring sea it means nothing. The chief difference between diplomacy and lying is that the former is honorable and the latter disgraceful.

Wichita Wholesale & Manufacturing Houses.

The houses given below are representative ones in their line, and thoroughly reliable. They are furnished thus for ready reference for the South generally, as well as for city and suburban buyers. Dealers and inquirers should correspond direct with names given.

CHAS. T. CHAMPION,
—WHOLESALE—
SCHOOL . BOOKS,
AND SCHOOL SUPPLIES.
Mail Orders will Receive Prompt Attention at
EASTERN PRICES.
118 East Douglas Avenue, - - - - - - - - Wichita, Kansas

GLOBE -. IRON -. WORKS,
MANUFACTURERS OF
Steam Engines, Boilers and Pumps, and Dealers in Brass Goods, Rubber and Hemp Packing, Steam Fittings, Etc. Repairing of all Kinds of Machinery a Specialty. Orders promptly filled for all kinds of Sheet Iron Work. All kinds of castings made.
A. FLAGG, Proprietor. - - - - - - - - Wichita, Kansas.

The Stewart Iron Works,
MANUFACTURERS OF
IRON FENCING,
Architectural, Wrought and Cast Iron Work for Buildings.
Factory: South Washington Avenue. Wichita, Kansas.

FLOUR DEPOT.
C. Eisenmayer Sr. Milling and Elevator Co., of Halstead, Kan., carry a full line of hard and soft wheat flour at their agency in this city. Send for prices and samples.
OTTO WEISS, Agent, 253 N Main, Wichita.

TO ART DEALERS AND ARTISTS.
Artist's Materials, Pictures, Mouldings and Frames Wholesale and retail. Catalogue free.
MAIL ORDERS PROMPTLY ATTENDED.
F. P. MARTIN, 114 Market St.
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SWAB & GLOSSER,
TAILORS
And Jobbers of Woolens and Tailors Trimmings.
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THOMAS SHAW
WHOLESALE DEALER IN
Pianos and Organs
Sheet music and books. All kinds of musical goods. Brass band and orchestra music. 129 Main Street, Wichita, Kansas.

WICHITA BOTTLING WORKS,
OTTO ZIMMERMANN, Prop.
Bottlers of Ginger Ale, Champagne Cider, Soda Water, Standard Nerve Food, also General Western Agents for Wm. J. Lemp's Extra Pale.
Cor. First and Waco Sts., - Wichita.

Trimble Bros. & Threlkeld,
WHOLESALE
HARDWARE
Special attention to mail orders.
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FOREST CITY COAL CO.
Wholesale and Retail. Telephone No. 157.
1@ North Water Street.

D. W. STALLINGS & SONS,
MANUFACTURERS OF
STALLING'S PALMOLE TOILET SOAP
Itbeautifies the complexion and keeps the skin soft, smooth clear and healthy. For sale by druggists and grocers.
526 Chicago Ave. - Telephone 99

EXTON WAREHOUSE.
Storage and Forwarding. Large brick building just completed, especially adapted for receiving and reshiping; cars from all railroads switched to house without charge; new, clean and well ventilated; almost fire proof; rates of insurance and storage low, goods carefully handled and reshipped on orders. Located east of Santa Fe freight depot.
JOHN EXTON,
Telephone 85. Office 611 E Douglas, Wichita, Ks

Cigar Headquarters. Cor. Main and First Streets.
W. T. BISHOP & SONS,
WICHITA, KANSAS.
Send us a Trial Order or Call and See Us.

—FINLAY ROSS—
WHOLESALE AND RETAIL
FURNITURE, CARPETS, ETC.
The Largest Establishment in the State.
Nos. 119 and 121 Main Street, - - - - - Wichita, Kansas.

GETTO-McCLUNG BOOT AND SHOE CO.,
Manufacturers and Wholesale Dealers in
BOOTS : & : SHOES.
All goods of our own manufacture warranted. Orders by mail promptly and carefully filled.
135 and 137 N Market Street, - - - - - Wichita, Kansas.

CORNER & FARNUM,
ROYAL SPICE MILLS,
Jobbers and Manufacturers, Teas, Coffees, Spices, Extracts, Baking Powders, Bluing, Cigars, Etc.
112 and 114 S Emporia Ave.

SPRAY YEAST.
The quickest, strongest and purest Dry Hop Yeast on the market. Will keep a year in any climate.
Price, 5 cents per package of 7 cakes For sale by all wholesale and retail grocers.
Manufactured by Corner & Farnum factory corner Kellogg and Mosley Avenues.

McCOMB BROS.
Manufacturers, Wholesale and Retail Dealers in
SADDLES & SADDLERY HARDWARE.
Correspondence Solicited.
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J. A. BISHOP,
Wholesale and Retail
WALL PAPER
Paints, Oils and Glass.
150 N Market St., Wichita, Kan

BURR FURNITURE CO.,
Wholesale and Retail
FURNITURE
125 East Douglas Ave.

CHAS. LAWRENCE,
—DEALER IN—
Photograhers' . Supplies!
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SHAFFER & MAHANEY
Wholesale and Retail
Coal, Grave[illegible] Roofing, Roofing and Building Materials.
Telephone 104. 18th St. and 4th Ave., Wichita, Kan.

BUTLER & GRALEY
Manufacturers and Dealers in
TINWARE, ETC.
All kinds of cans for shipping purposes, fruits, baking powder, etc.
213 South Main, Wichita, Kan.

E. VAIL & CO.,
WHOLESALE
WATCHES, JEWELRY,
CLOCKS AND SILVERWEAR.
106 E Douglas Ave., - Wichita.

The Hyde & Humble Sta. Co.,
Wholesale and Retail Dealers in
Books : and : Stationery,
Wall Paper, Wrapping Papers.
114 N Main St., - Wichita, Kan

THE JOHNSTON & LARIMER DRY GOODS CO..
—WHOLESALE—
Dry : Goods, : Notions : and : Furnishing : Goods.
Complete Stock in all the Departments.
119, 121 & 123 N Topeka Ave. - - - - - - Wichita, Kansas.

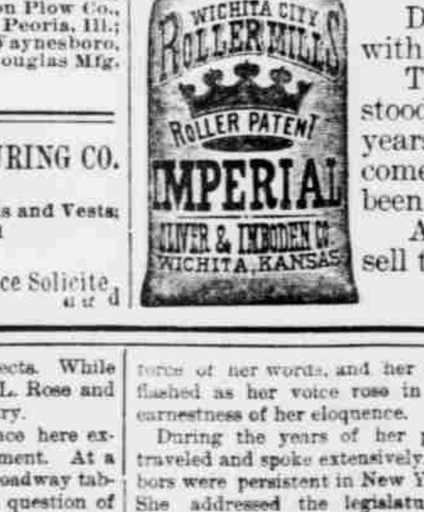
WICHITA WHOLESALE GROCERY CO.,
Wholesale . Grocers,
OFFICE AND WAREHOUSE 213 TO 223 SOUTH MARKET STREET.
Keep everything in the grocery line, show cases, Scales and grocers fixtures. Sole agents for the state for "Grand Republic" cigars, also sole proprietors of the "Royalty" and "La Innocencia" brands. d5

—L. M. COX,—
Manufacturing -. Confectioner,
And jobber in Figs, Dates, Cigars, Foreign and Domestic Nuts, Cider, Paper Bags, Paper Boxes, Candy Jars, Trays, Etc.
215 and 217 South Main St., - - - - - - Wichita, Kansas.

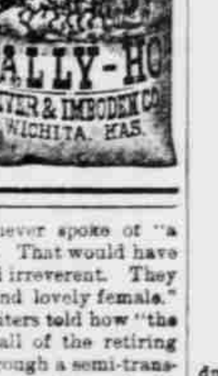
THE C. E. POTTS DRUG CO.
(Formerly Charles E. Potts & Co., Cincinnati, O.)
WHOLESALE DRUGGISTS.
Goods Sold at St. Louis and Kansas City Prices.
233 and 235 South Main Street, - - - - - - Wichita, Kansas.

Wichita Trunk Factory
H. HOSSFIELD, Proprietor.
Manufacturer Of, Wholesale and Retail Dealer in Trunks, Valises, Satchels, Shawl and Trunk Straps, Pocket Books, Willow Ware, Etc.
125 W Douglas.

BAKER, BLASDEL & CO.,
COR. MARKET AND FIRST STS., WICHITA, KAN.
Manufacturer,s wholesale, transfer and forwarding agents, and dealers in carriages, wagons, farm implements, wind mills, scales, engines and threshing machinery. We have on hand a full line of the following manufacturers goods that we can ship at quick notice:
Studebaker Bros. Mfg. Co., South Bend, Ind.; Enterprise Carriage Co., Cincinnati, Ohio; Hoover & Gamble, Miamisburg, Ohio; Esterly Harvesting Co., Whitewater, Wis.; Fairbank, Moore & Co., Chicago, Ill.; Walton Plow Co., Bloomington, Ill.; Pekin Plow Co., Pekin, Ill.; Avery Planter Co., Peoria, Ill.; Jno. Dodds Hay Rack Co., Dayton, Ohio; Frick Engine Co., Waynesboro, Penn.; Massilton Thrasher Co., Massilton, Ohio; Krugslornd & Douglas Mfg. Co., St. Louis, Mo.; Huber Engine Co., Marion, Ohio.



Do not experiment with new FLOURS.
These brands have stood the test for sixteen years against all newcomers and have never been befeated.
All first-lass grocers sell them.



THE WICHITA OVERALL AND SHIRT MANUFACTURING CO.
MANUFACTURERS AND JOBBERS OF
Overalls, Jeans, Cassimere and Cottonade Pants; Duck Lined Coats and Vests; Fancy Flannel and Cotton Overshirts; Canton Flannel Undershirts, Drawers, Etc.
Factory and Salesroom 139 N. Topeka, Wichita. Correspondence Solicited

ERNESTINE L. ROSE.

A Reminiscence from Lillie Devereux Blake.

[Special Correspondence.]

NEW YORK, Oct. 7.—Probably the most fiery orator that the early days of the woman's suffrage cause produced, the Patrick Henry of the movement, was Ernestine L. Rose. She was born in 1810, and her active years were over before I entered the movement, but from those who knew her in her prime I have heard much of the romantic story of her life. Her early home was at Pyeterkow, Poland. She was the daughter of a Jewish rabbi, so strict in his asceticism that he practiced long fasts to the injury of his health and temper. The earnest child, seeing her father's wasted looks, once asked him why he inflicted upon himself such austerities. His reply "to please God" startled her questioning thoughts, and some time later she renounced the faith of her forefathers, to the distress of her family and the horror of her friends.

Her home was no longer happy, and after a dispute about the settlement of her mother's estate, in which, though she was then only a girl of 16, she plead her own cause in court and gained her suit, she took the small property to which she felt herself entitled and traveled through Europe. In England she met the early anti-slavery leaders, and gave herself heart and soul to the cause of human freedom in all its aspects. While there she married William L. Rose and came with him to this country.

Her first public appearance here excited at the time great comment. At a mass meeting in the old Broadway tabernacle, held to discuss the question of free schools, one of the speakers deviated from his theme to denounce what he called "infidels." Mrs. Rose stood up in her place in the front of the gallery and called him to order. A wild scene of excitement followed. There were cries of "Throw her down!" "Drag her out!" and so on, but she stood her ground, her clear, sweet voice rising above the tumult, her impressive personality commanding respect. In a few moments silence fell on the crowd, and her eloquent protest against such an attack was listened to with respect and at her close applauded.

She was then only 26 years old, tall and dignified in figure, with keen dark eyes, curling black hair and a brilliant complexion. Speaking of her as she was in her prime The Boston Investigator says: "She was an excellent lecturer, liberal, eloquent, witty, and, we must add, decidedly handsome—'the Rose that all were praising.'" From this period she became a leading orator of the anti-slavery cause and later of the woman suffrage agitation. I never heard her speak but once, and she was then an old lady and in frail health, but she thrilled the audience by the electric force of her words, and her dark eyes flashed as her voice rose in the fiery earnestness of her eloquence.

During the years of her prime she traveled and spoke extensively. Her labors were persistent in New York state. She addressed the legislature many times, and it was largely owing to her efforts that the state laws were passed that secure to married women in New York the right to their earnings and their property. Before that time the money due a woman for washing, for school teaching or for literary work belonged to her husband, and he could draw her wages and spend them without her consent, nor could a wife hold or inherit property—everything belonged to her husband. The liberal laws which we now live under are due to the tireless exertions of this gifted woman, and never ought the women of New York to forget the debt of gratitude they owe to Ernestine L. Rose.

LILLIE DEVEREUX BLAKE.

The Women of Today.

NEW YORK, Oct. 9.—Whatever may be said of the girl of the period, and however you may ridicule the current "fad" of physical culture, you must admit that the woman of to-day is much more self-reliant than the girls of her grandmother's time.

The articles that were written about women and woman's sphere in those days give a queer view of femininity. For instance, they never spoke of "a pretty girl." Oh, no! That would have been too flippant and irreverent. They called her "a young and lovely female." And the magazine writers told how "the feminine virtues are all of the retiring kind, and are seen through a semi-transparent veil of feminine timidity and self-postponement." And they sometimes severely added that if men ever seemed to admire any other kind it was "due to bad taste and coarseness of mind."

They frequently compared their own countrywomen to those of other nations, and, with whatever grudging admiration or outright disapproval they spoke of the latter, they always turned their delighted faces homeward with some such words as these: "In our country woman preserves that retiring and timid delicacy most attractive in her character, and calls forth our respectful tenderness by reason of her graceful dependence." It is still the American custom to compare the American woman, greatly to her credit, with the woman of other countries; but very different are the words with which it is done and the reasons given for her superiority!

The magazine writers of those days also discussed the question whether it was possible to be a patriot and also a true woman. It seemed rather a daring matter, since [illegible] and "retiring and timid delicacy" and "graceful dependence" didn't seem to go well together. So women were advised not to form themselves into societies for any purpose whatever, since such a course "rendered the sex needlessly conspicuous, and should therefore be avoided."

One needs to think of that time and then of this in order to appreciate the distance that has been traveled in the general notions about women since such opinions as those were the accepted ones.

FLORENCE FINCH-KELLY.

A CRACK CARBINEER.

The Bull's Eye Weeps When It Beholds Capt. John B. Kerr.

Like Lieut. Charles H. Muir, the crack rifleman, Capt. John B. Kerr, of the Sixth United States cavalry, won high honors in marksmanship at the recent regular army shoot at Camp Douglas, Wis. His weapon was the carbine, and according to the war department no one in the entire regular army can equal him in the use of that firearm.

Kerr is an old campaigner, and although but 43 years of age he has spent a score of years in Uncle Sam's service, most of which time has been devoted to arduous and thrilling service against hostile Indians throughout the west from Canada to Mexico. Capt. Kerr was born near Lexington, Ky., entered West Point in 1866, was graduated in 1870 a second lieutenant, became first lieutenant in 1874 and captain in 1875. Kerr began target practise with the carbine in 1887, and during that year captured five important medals, which victories barred him forever from any but army competitions, and won for him the title of "distinguished marksman."

CAPT. J. B. KERR.

Kerr was the first carbineer to use the prone figure as a target, and to his success in riddling this difficult mark he attributes his rise to fame. His accuracy in skirmish firing is said to be phenomenal. At Camp Douglas Kerr carried everything before him, and was decorated with the gold medal of 1890 by Gen. Ruger. Kerr is the hero of a long list of brilliant campaigns against the Indians with Gen. Miles. In 1881 Kerr took a prominent part in the pursuit of Victoria's bloodthirsty band, which culminated in the death of that famous chief and the subjugation of his warriors. Kerr was also a participant in all the thrilling battles with the crafty Geronimo and his band in 1885.

A Beautiful Chess Trophy.

The Germans are great admirers of chess, and that they are brainy and persistent students of the game is evidenced by the fact that Germany has placed in the lists some of the greatest players the world ever saw. For the encouragement of the game in the Empire State The New Yorker Staats-Zeitung has presented a beautiful silver cup to the New York State Chess association, which is to be contested for under certain rules.

THE CHESS TROPHY.

The cup is designed to represent a castle—one of the pieces used in chess—and is over a foot in height. It has two unique handles, and upon the cover stands the figure of a king. All the chess pieces appear in relief around the base, and on the burnished face of the cup is an engraving of two mounted knights battling for supremacy. A chess board bearing the coat of arms of New York state, crowns and shields are also tastefully arranged upon the surface of the cup, and the sight of the trophy will fire every Empire State player with ambition to win it.

Third Baseman Denny.

Jeremiah Denny, third baseman of the New York National League club, was born at New York city thirty-one years ago. In 1877 he entered upon his first professional engagement with the Eagle club, of San Francisco, playing left field for three seasons. His ambition was to do infield work, and in 1880 he played third base with the Athletic club, of San Francisco. The following five years he played in his pet position with the old Providence club, of the National league. He was then sold to St. Louis, and remained with that team during 1886. He was next transferred to Indianapolis, and remained with the "Hoosiers" until last spring, when he came to New York.

JEREMIAH DENNY.

Denny is a talented fielder and a hard hitter, and he holds down his favorite position in excellent style. He made a safe hit each of the six times he went to bat in a game between Indianapolis and Pittsburg in 1889. He has made some marvelous stops, and, although occasionally a little wild, he is generally considered an accurate and powerful thrower. Denny has the record of having successfully accepted from fourteen to seventeen chances in many games during his career.

The snug sum of $20,000 in prizes will be awarded at the second annual exhibition of the American Horse Show association of Chicago, which will be held in the exposition building in Chicago from Nov. 1 to Nov. 8.

A match for $5,000 a side and the championship of America has been arranged between the oarsmen Edward Hanlan and W. J. O'Connor. The contest is to be decided on the Pacific coast in a few months.

James Corbett, the California pugilist who defeated Jake Kilrain, has an odd method of hardening his hands. He plays "catch," and does feats of jugglery with a pair of small iron cannon balls.

FILLED FULL OF LEAD.

A Stalwart Hawkeye Who Defied Death in Numerous Battles.

Capt. S. J. McKinley, of Mitchell county, Ia., is a man with a physical history that may be termed unequaled. He was a soldier of the late civil war. When he enlisted no scar or blemish disfigured his person. He received his first wound at Kirksville, Mo., being shot in the head. He got another head wound at Port Gibson. During the battle of Champion Hills a shell exploded over him, one piece crushing through his face near the right nostril and lodging in his throat, and another imbedding itself in his brain. After lying on the field thirty-six hours he was picked up and attended to, an iron band being placed around his skull to keep it together. On recovering he joined the Red River expedition, and at Shaggy Point he was shot in the arm. At the battle of Winchester he got a ball in the hip. He ended his career as a wound getter at Fisher Hill with two bullet holes in the hip and a broken thigh. Uncle Sam then concluded that Capt. McKinley had done enough for his country, and discharged him "on account of wounds received in action."

CAPT. S. J. M'KINLEY.

But the captain had still one more fighting experience to come. Years ago, when it was the custom of the Chicago and Northwestern railway to reserve a car on each passenger train for ladies, McKinley stepped from one of them to bid a friend goodby. On attempting to return for his valise a brakeman stopped him, and in the ensuing altercation dislocated his left shoulder with a blow. McKinley "swung his right," and when the discussion ended the brakeman was nearly dead. Then the captain "went for" the company, and after twelve years of litigation secured $9,871 damages.

Since the war this badly shattered veteran has had 111 pieces of bone taken from his body, eighty-seven being taken from the head alone. Yet to the ordinary observer he seems a picture of perfect health. Capt. McKinley is now 52 years old, and has yet to know the taste of liquor or [illegible]